

**AUTOMATED TRANSFORMATION OF SPECIFICATIONS FOR DEVICES
INTO EXECUTABLE MODULES**

Abstract

5 A number of configuration elements are associated with a number of
devices. Information about input configuration elements is accessed. An input
configuration element is associated with one or more input rules. It is determined
which of the configuration elements could be accessed by the input rules and any call
chains emanating from the rules. Output rules are determined by using the accessed
10 configuration elements, the input rules, and the way the input rule manipulates its
accessed configuration elements. Each output rule may be derived from an input rule
and corresponds to the same input configuration element associated with that input
rule. An executable module is generated that is adapted to access at least a given one
of the input configuration elements and to trigger one or more of the output rules
15 corresponding to the given input configuration element. Read and write sets for rules
are determined, and the triggered output rules ensure that restrictions associated with
a configuration element are not violated